US Army Corps
of Engineers
Alaska District

Regulatory Branch (1145)
CEPOA-CO-R-NF
3437 Airport Way, Suite 206
Fairbanks, Alaska 99709-4777

Public Notice of Application for Permit

PUBLIC NOTICE DATE: January 22, 2007

EXPIRATION DATE: February 21, 2007

REFERENCE NUMBER: POA-2006-1986-4

WATERWAY: Chatanika River

Interested parties are hereby notified that an application has been received for a Department of the Army permit for certain work in waters of the United States as described below and shown on the attached plan.

APPLICANT: Alaska Department of Transportation and Public Facilities (ADOT&PF), 2301 Peger Road, Fairbanks, Alaska 99709.

LOCATION: The proposed project is located within sections 5, 6, T. 5 N., R. 7 E., sections 13, 14, 22, 23, 27, 28, 32, 33, T. 6 N., R. 7 E., sections 1,2,3, 9, 10, 16, 17, 18, T. 6 N., R. 8 E., and sections 30, 31, T. 7 N., R. 9 E., Fairbanks Meridian, beginning at Latitude 65.2915° N., Longitude -146.3766° W., and ending at Latitude 65.3710° N., Longitude -146.0575° W., Mileposts (MP) 69 - 81 of the Steese Highway, northwest of Fairbanks, Alaska.

PURPOSE: Improvements to the Steese Highway, Milepost 69-81. See Attached Letter dated November 20, 2006.

WORK: The applicant proposes to place approximately 93,500 cubic yards of clean fill material into approximately 17.4 acres of wetlands. The applicant also proposes an additional 20.3 acres of wetland impacts associated with temporary work areas, including construction access, equipment staging and operation areas, and temporary stockpiles. All work would be completed in accordance with the attached letter dated November 20, 2006, the attached plans, sheets 1 to 12, dated October 2006 and the Synopsis of Wetland Involvement, sheets 1-4, dated November 20, 2006.

ADDITIONAL INFORMATION:

Reconditioning and Associated Improvements: The applicant proposes to resurface the roadway with high-float asphalt; upgrade guardrails and remove roadside vegetation.

Icing Area Improvements: A rock drain system would be constructed at one location.

Embankment Area Improvements: Excavated material would be used to improve slopes at several locations.

Culvert Replacement and Improvements: The applicant proposes to replace damaged or inadequate culverts as appropriate. The culverts at Idaho Creek and Montana Creek would be replaced with fish passage culverts. ADOT&PF would require the contractor to submit a work plan for the construction activities at each of the stream crossings. Each work plan would be submitted to the Corps for review at least four

weeks prior to the intended start date of construction activities for review and comment. See attached plans for additional information.

WATER QUALITY CERTIFICATION: A permit for the described work will not be issued until a certification or waiver of certification as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

CULTURAL RESOURCES: The latest published version of the Alaska Heritage Resources Survey (AHRS) has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. There are no listed or eligible properties in the vicinity of the worksite. Consultation of the AHRS constitutes the extent of cultural resource investigations by the District Engineer at this time, and he is otherwise unaware of the presence of such resources. This application is being coordinated with the State Historic Preservation Office (SHPO). Any comments SHPO may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work.

TRIBAL CONSULTATION: The Alaska District fully supports tribal self-governance and government-to-government relations between the Federal government and Federally recognized Tribes. This notice invites participation by agencies, Tribes, and members of the public in the Federal decision-making process. In addition, Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This Public Notice serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal right or resource. Consultation may be initiated by the affected Tribe upon written request to the District Engineer during the public comment period.

ENDANGERED SPECIES: No threatened or endangered species are known to use the project area.

Preliminarily, the described activity will not affect threatened or endangered species, or modify their designated critical habitat, under the Endangered Species Act of 1973 (87 Stat. 844). This application is being coordinated with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. Any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The proposed work is being evaluated for possible effects to Essential Fish Habitat (EFH) pursuant to the Magnuson Stevens Fishery Conservation and Management Act of 1996 (MSFCMA), 16 U.S.C. et seq and associated federal regulations found at 50 CFR 600 Subpart K. The Alaska District includes areas of EFH as Fishery Management Plans. We have reviewed the January 20, 1999, North Pacific Fishery Management Council's Environmental Assessment to locate EFH area as identified by the National Marine Fisheries Service (NMFS).

We have determined that the described activity within the proposed area will not adversely affect EFH, including anadromous fish and federally managed fishery resources.

SPECIAL AREA DESIGNATION: None.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur. That decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Engineer determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Comments on the described work, with the reference number, should reach this office no later than the expiration date of this Public Notice to become part of the record and be considered in the decision. Please contact **Benjamin Soiseth** at (907) 474-2166 or by email at Benjamin.N.Soiseth@poa02.usace.army.mil if further information is desired concerning this notice.

AUTHORITY: This permit will be issued or denied under the following authorities:

(X) Discharge dredged or fill material into waters of the United States - Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

A plan and Notice of Application for State Water Quality Certification are attached to this Public Notice.

District Engineer
U.S. Army, Corps of Engineers

Attachments

SARAH PALIN, GOVERNOR

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF WATER
401 Certification Program
Non-Point Source Water Pollution Control Program

NOTICE OF APPLICATION

FOR

STATE WATER QUALITY CERTIFICATION

Any applicant for a federal license or permit to conduct an activity that might result in a discharge into navigable waters, in accordance with Section 401 of the Clean Water Act of 1977 (PL95-217), also must apply for and obtain certification from the Alaska Department of Environmental Conservation that the discharge will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. By agreement between the U.S. Army Corps of Engineers and the Department of Environmental Conservation, application for a Department of the Army permit to discharge dredged or fill material into navigable waters under Section 404 of the Clean Water Act also may serve as application for State Water Quality Certification.

Notice is hereby given that the application for a Department of the Army Permit described in the Corps of Engineers' Public Notice No POA 2006 1986 4, Chatanika River, serves as application for State Water Quality Certification from the Department of Environmental Conservation.

After reviewing the application, the Department may certify that there is reasonable assurance that the activity, and any discharge that might result, will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. The Department also may deny or waive certification.

Any person desiring to comment on the project with respect to Water Quality Certification may submit written comments within 30 days of the date of the Corps of Engineer's Public Notice ***to:***

Department of Environmental Conservation
WQM/401 Certification
555 Cordova Street
Anchorage, Alaska 99501-2617
Telephone: (907) 269-6281
FAX: (907) 269-7508

FRANK H. MURKOWSKI, GOVERNOR

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

NORTHERN REGION, PRECONSTRUCTION

2301 PEGER ROAD
FAIRBANKS, ALASKA 99709-5316
TELEPHONE: (907) 451-2238
TDD: (907) 451-2363
FAX: (907) 451-5103
EMAIL: *bob effinger@dot.state.ak.use*

November 20, 2006

RE: Steese Highway Milepost 69-81
Surface Treatment
Project STP-0670(34)/60916

INDIVIDUAL PERMIT REQUEST

Christy Everett
Field Office Manager
Fairbanks Field Office–North Section
U.S. Army Corps of Engineers
3437 Airport Way, Suite 206
Fairbanks, AK 99709-4777

Dear Ms. Everett:

On June 28, 2005, the Alaska Department of Transportation and Public Facilities (DOT&PF) submitted a Corps of Engineers Section 404 permit application for the Steese Highway Milepost (MP) 62 to MP 81. This project, for several reasons, was split into two separate projects for final design and construction (i.e., Steese Highway MP 62-69 Surface Treatment, Project No. STP-0670(35)/61430; and the Steese Highway MP 69-81 Surface Treatment, Project No. STP-0670(34)/60916). The MP 62-69 application was submitted April 14, 2006. Enclosed is the permit application for the MP 69 to MP 81 portion of the highway.

Enclosed is a Section 404 permit application for work affecting jurisdictional wetlands and Waters of the U.S. for the Steese Highway resurfacing between MP 69 (just north of Faith Creek Bridge) and the road closure gates near MP 81 (just east of Montana Creek) (Permit Application, Sheet 1). The fill material for this project is anticipated to come from several sources such as; Material Site (MS) 670-103-2 located at approximately MP 67.5 (Department of Army Permit #POA-2003-1472-4), Material Site 670-078-2 at approximately MP 38.5 for riprap and ditch lining, and excavated material from within the project.

The Steese Highway MP 69-81 Surface Treatment ("gravel-to-pavement") project is located in:

USGS Quad	Section	Township	Range	Meridian
Circle B-5	5-6	5N	7E	FM
Circle B-5	13,14, 22, 23, 27, 28, 32, 33	6N	7E	FM
Circle B-5	2-3, 9, 10, 16-18	6N	8E	FM
Circle B-5/B-4	1	6N	8E	FM
Circle B-4	30, 31	7N	9E	FM

The proposed project is designed to reduce maintenance costs and improve the quality of life for Alaskans. Converting the existing gravel-surfaced highway to a paved-surface highway would lower the maintenance requirements for grading the roads. The project would also reduce dust, which would increase visibility and therefore public safety. Minor shoulder and drainage improvements and erosion protection are provided in areas where these issues may affect the road structure. During the summer of 2005, similar improvements were constructed from MP 53 to 62. A separate project will extend these improvements from MP 62 to 69, and the current project would continue our systematic improvements to the road closure gates near MP 81.

The Steese Highway MP 69 to MP 81 includes the following improvements:

- Surface the roadway with a high-float asphalt surface course (28' wide) to improve the driving surface and alleviate roadway dust, thus improving visibility and safety.
- Reduce icing problems at one location by constructing a rock drain system to ease the burden of high maintenance costs.
- Use excavated material to improve embankment slopes at several locations.
- Upgrade guardrail to meet current height and length-of-need standards.
- Replace damaged or inadequate culverts as appropriate.
- Replace fish passage culverts at Idaho Creek and Montana Creek and construct a headwall with riprap protection at each inlet and construct a deadman with riprap stilling basin and apron at each outlet to reduce risk of embankment erosion.
- Remove two existing culverts on the old highway alignment at Idaho Creek and re-profile the stream channel.
- Remove roadside vegetation to improve sight distance within the right-of-way.

The Categorical Exclusion (CE) for the entire project (MP 62 to 81) was previously provided with the MP 62 to 69 application. Please note that some of the culvert work and embankment improvement areas identified in the CE have been modified based upon agency coordination following the previous permit application review (see enclosed meeting record).

On September 16, 2004, a Jurisdictional Determination (JD) for the project area was issued. Based on the JD, we have enclosed a Synopsis of Wetlands Involvement that provides a summary of the proposed work in wetlands and waters of the United States.

Additionally, our contract specifications will require the contractor to submit a work plan for the construction activities at each of the stream crossings. Each work plan will be submitted to your office at least four weeks prior to the intended start date of construction activities for review and comment. After three weeks of the date of submittal of the work plan(s), we'll assume the plan is sufficient unless we hear otherwise from you or your staff. Thank you for your time and consideration.

If you have any questions or require additional information, please feel free to contact Bob Effinger, Environmental Impact Analyst, at (907) 451-5294 or at *bob_effinger@dot.state.ak.us.*

Sincerely,

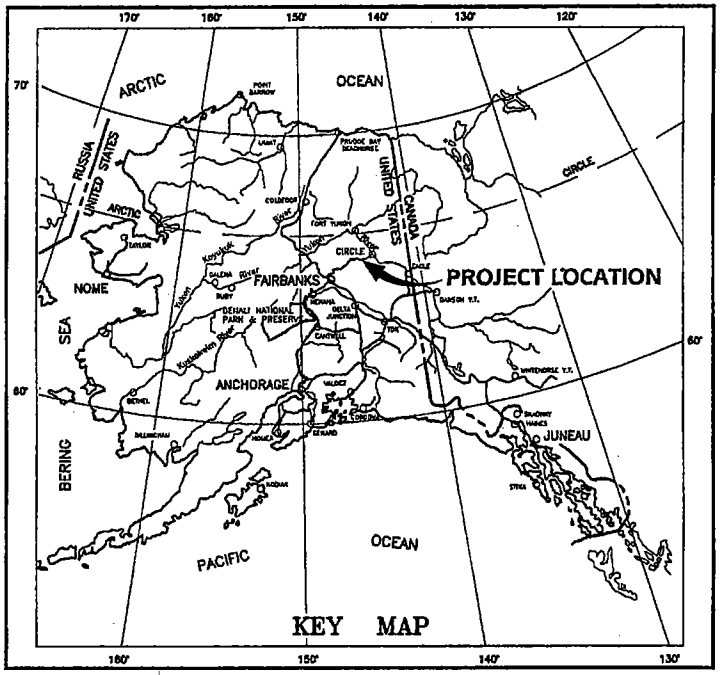
~~Chuck Howe~~
Acting Northern Region Environmental Coordinator
Bill Ballard

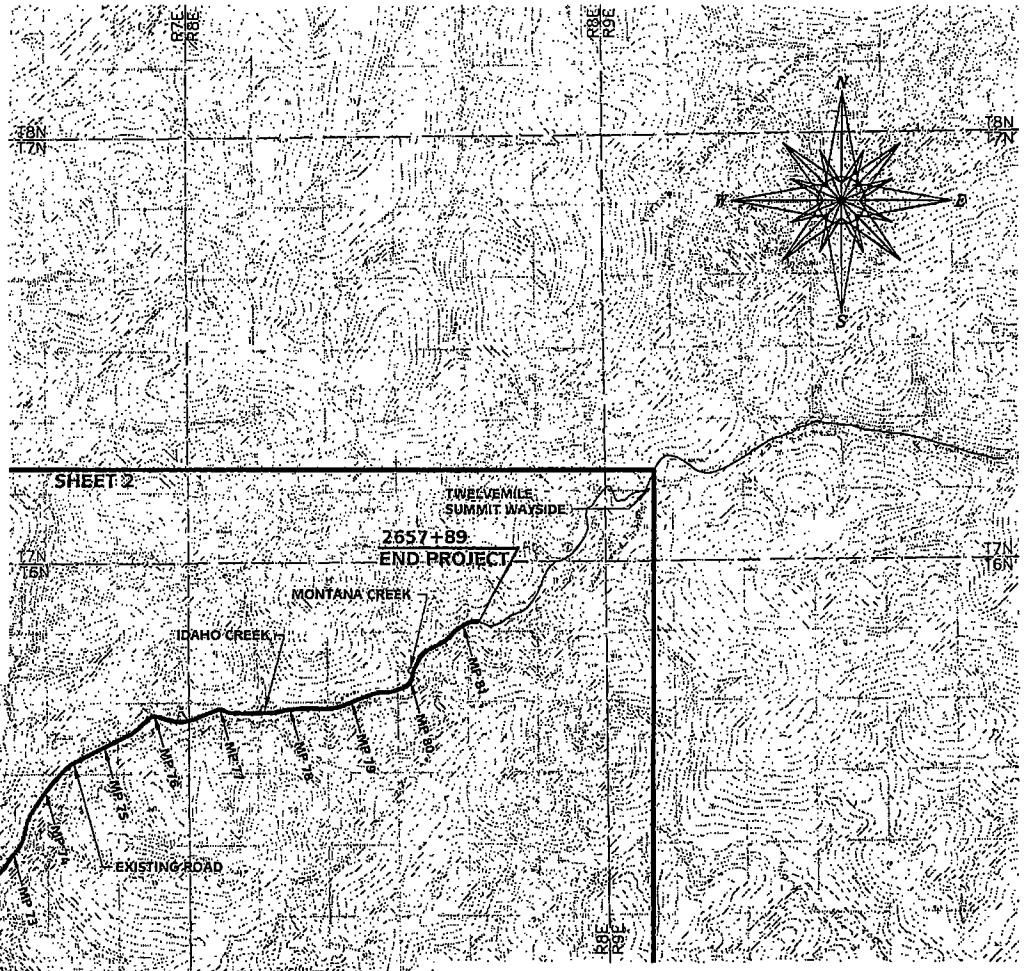
Bill Ballard
Statewide Environmental Coordinator

RE/dt

Enclosures: Corps of Engineers Permit Application/Sheets 1-12
Synopsis of Wetland Involvement
DOT&PF Preconstruction Telephone/Meeting Records dated 8/25/2005

cc: Keith Hanneman, P.E., Project Manager, PDC, Inc., Fairbanks
Nancy Ihlenfeldt-McNay, Habitat Biologist, ADNR-OHMP, Fairbanks
Rosalind Kan, P.E., Engineering Manager, ADOT&PF, Northern Region





ICING AREAS

MATERIAL SITE & ACCESS ROAD

P:\2001\F01015\N\MP69-81\N6981coF01015: (COE) Sht01 10/20/2006 - 11:42am

POA-2006-1986-4

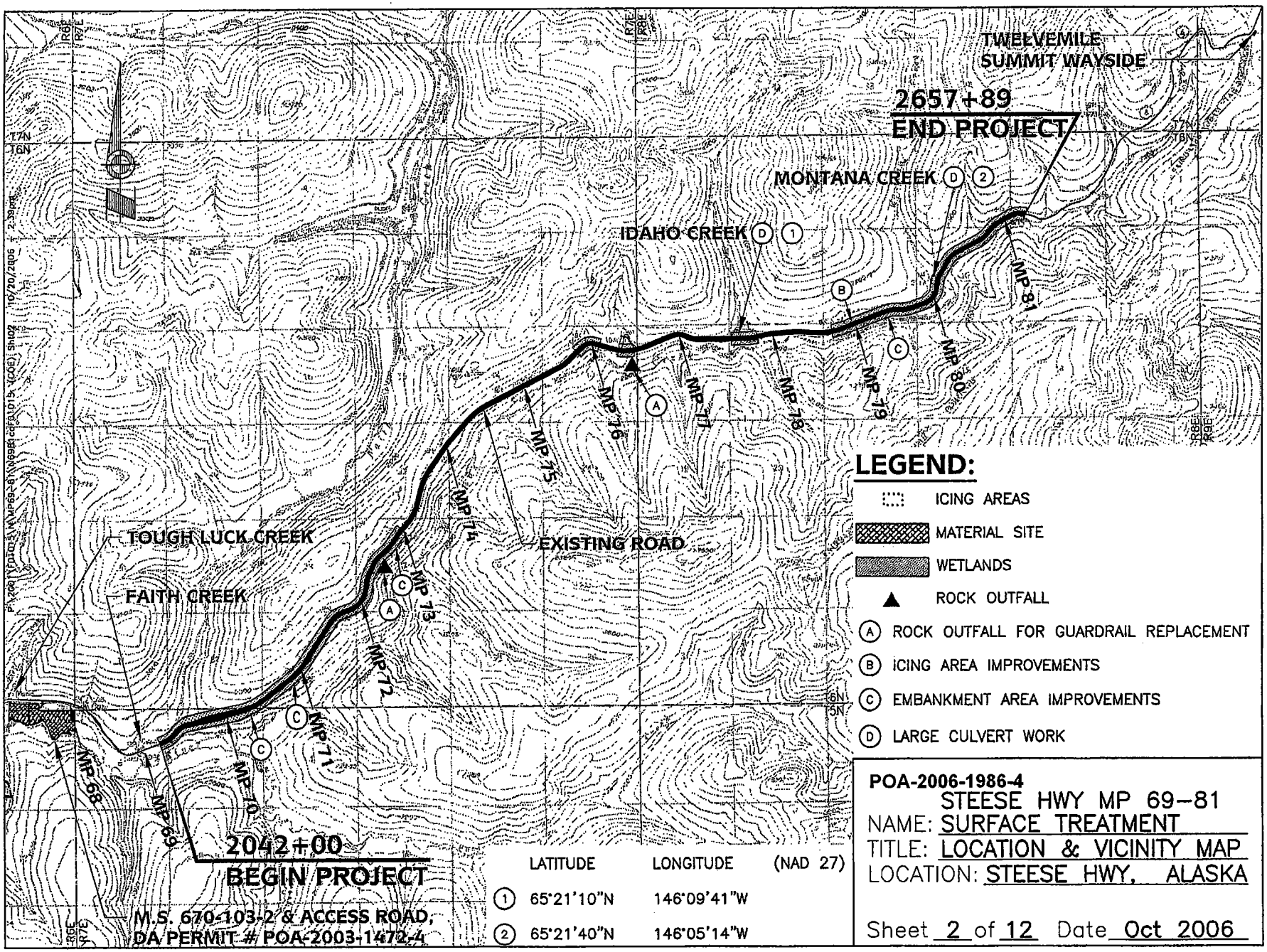
STEESE HWY MP 69–81

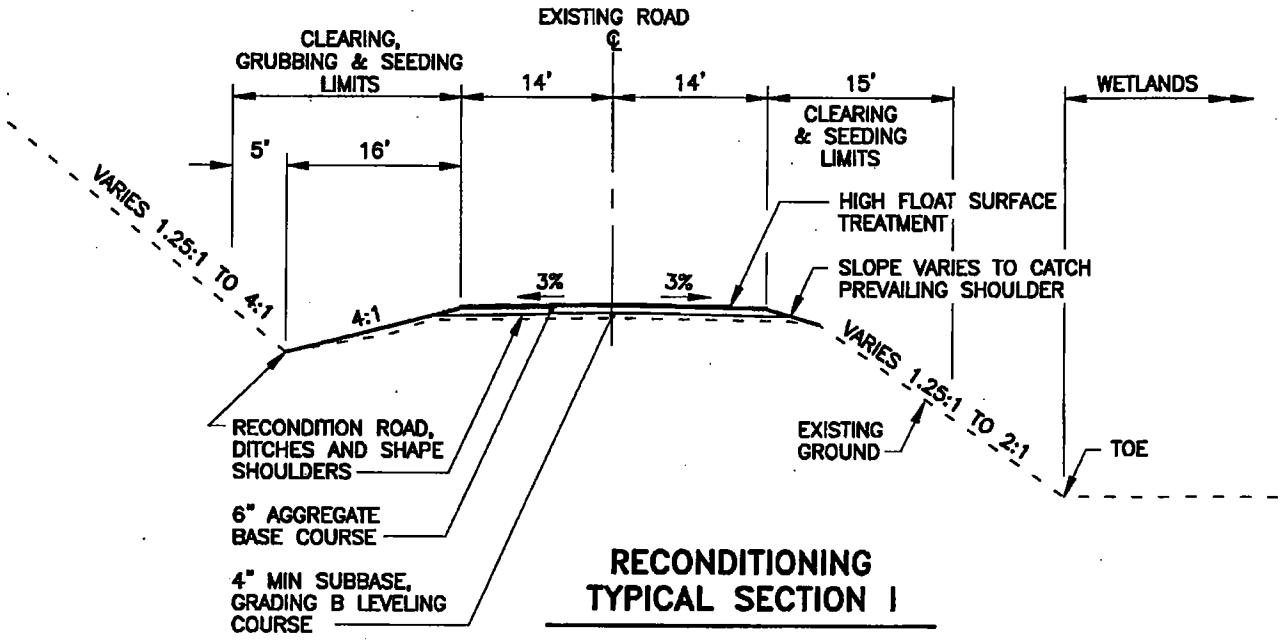
NAME: SURFACE TREATMENT

TITLE: LOCATION & VICINITY MAP

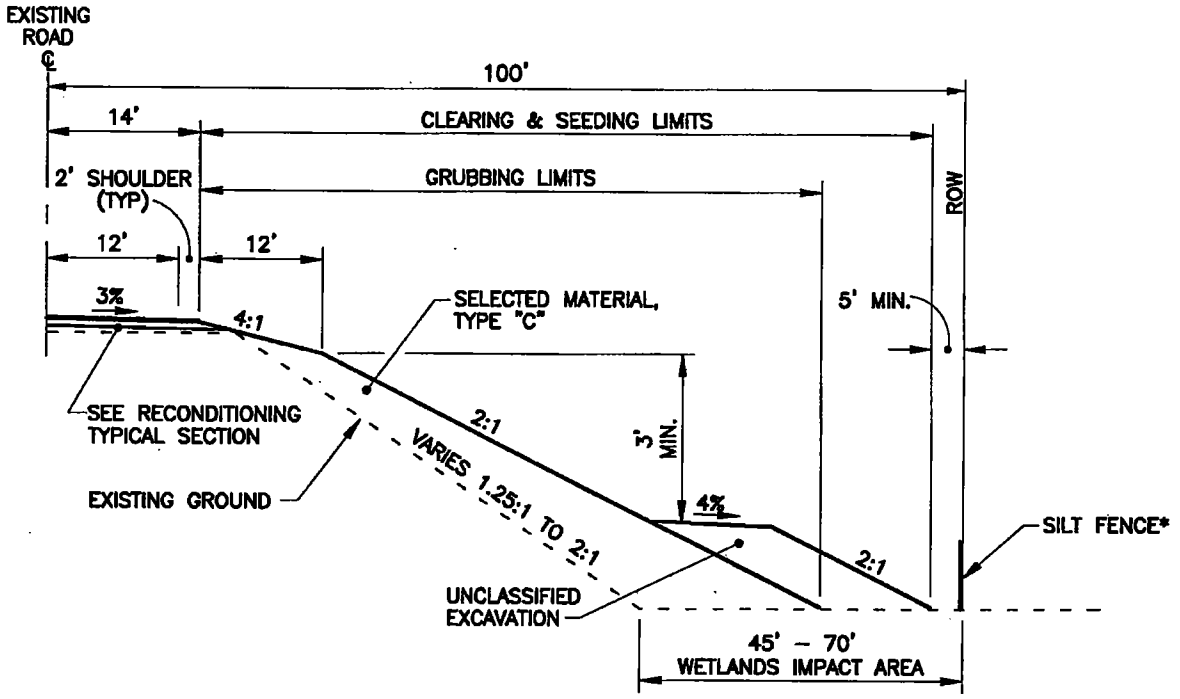
LOCATION: STEESE HWY, ALASKA

Sheet 1 of 12 Date Oct 2006


TWELVEMILE SUMMIT WAYSIDE
2657+89
END PROJECT
MONTANA CREEK
IDAHO CREEK
MP 81
MP 80
MP 79
MP 78
MP 77
MP 76
MP 75
MP 74
MP 73
MP 72
MP 71
MP 70
MP 69
MP 68
TOUGH LUCK CREEK
FAITH CREEK
EXISTING ROAD
2042+00
BEGIN PROJECT
M.S. 670-103-2 & ACCESS ROAD,
DA PERMIT # POA-2003-1472-4
T7N
T6N
R6E
R7E
R8E
R9E
LEGEND:
ICING AREAS
MATERIAL SITE
WETLANDS
ROCK OUTFALL
A ROCK OUTFALL FOR GUARDRAIL REPLACEMENT
B ICING AREA IMPROVEMENTS
C EMBANKMENT AREA IMPROVEMENTS
D LARGE CULVERT WORK
LATITUDE LONGITUDE (NAD 27)
1 65°21'10"N 146°09'41"W
2 65°21'40"N 146°05'14"W
POA-2006-1986-4
STEESE HWY MP 69–81
NAME: SURFACE TREATMENT
TITLE: LOCATION & VICINITY MAP
LOCATION: STEESE HWY, ALASKA
Sheet 2 of 12 Date Oct 2006



RECONDITIONING TYPICAL SECTION I



EMBANKMENT IMPROVEMENT AREA

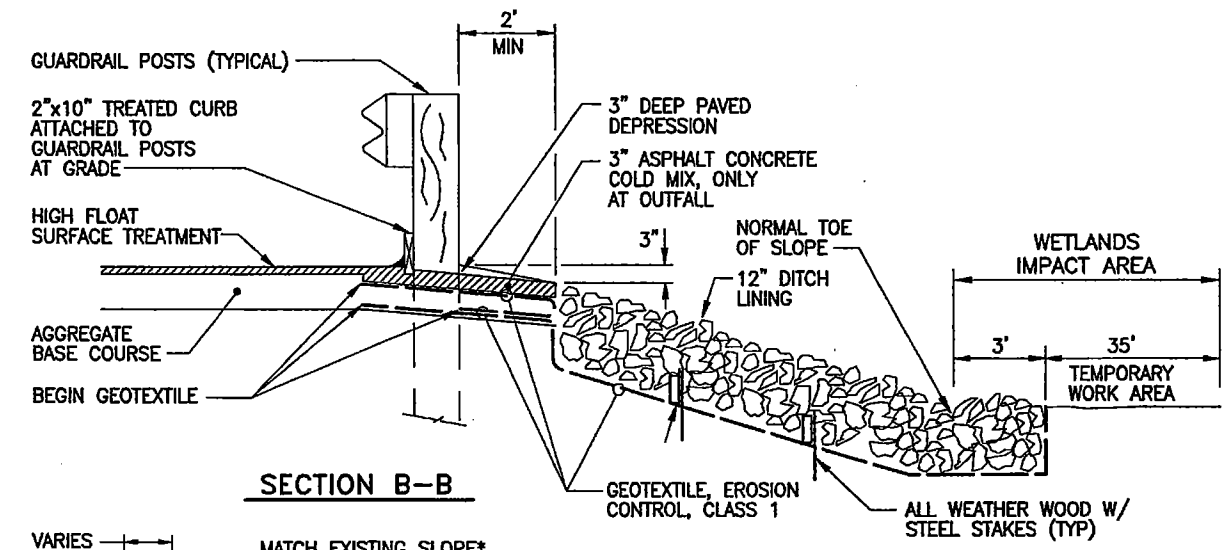
* THE SILT FENCE IS A TEMPORARY EROSION CONTROL FEATURE.

P:\2001\FD1015\N\MP69-81\N6981scFD1015: Sht 3 01/09/2007 - 1:53pm

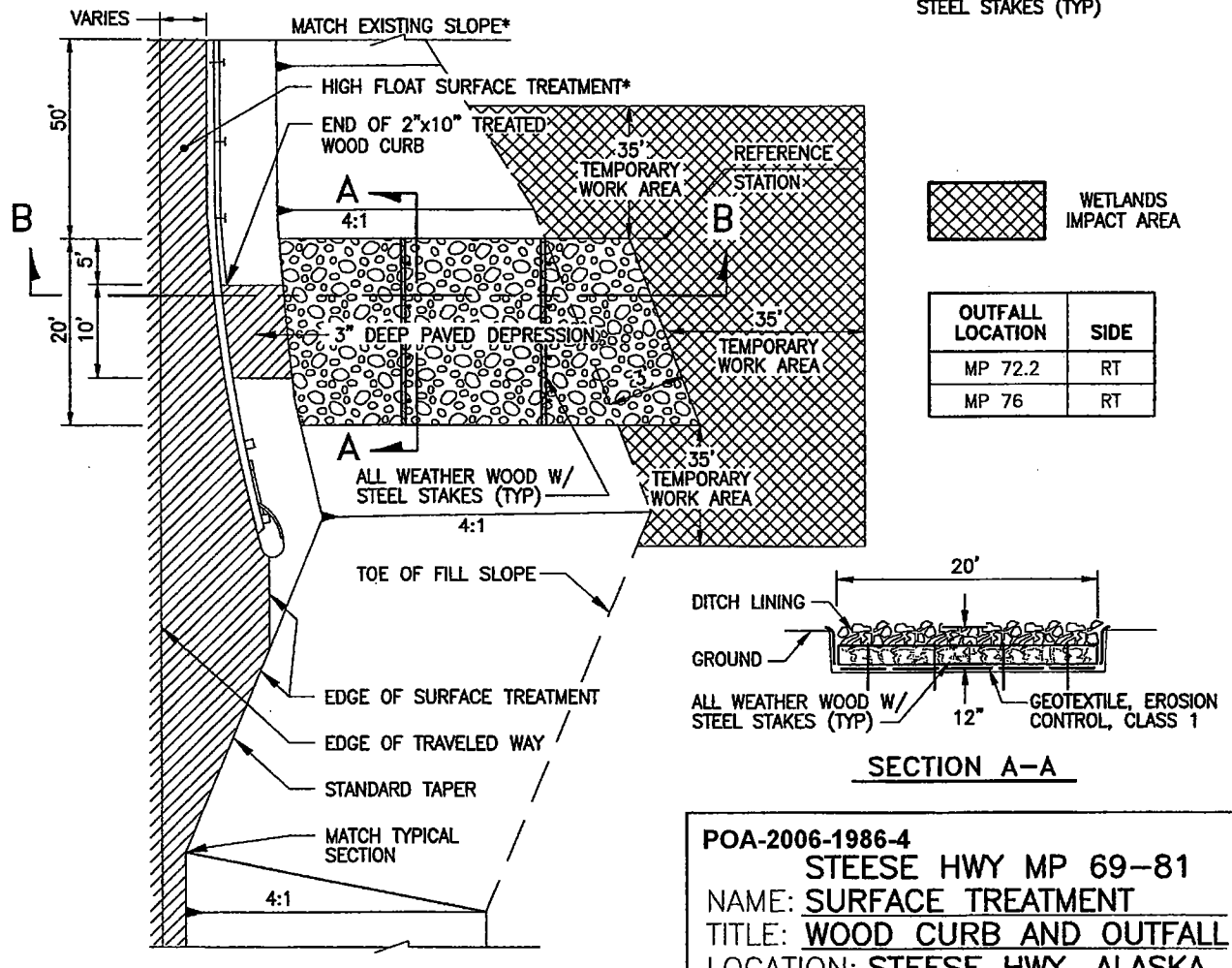
POA-2006-1986-4
STEESE HWY MP 69–81
NAME: SURFACE TREATMENT
TITLE: TYPICAL SECTIONS
LOCATION: STEESE HWY, ALASKA

Sheet 3 of 12 Date Oct 2006

GUARDRAIL MOUNTED WOOD CURB AND OUTFALL DETAIL



SECTION B–B



OUTFALL LOCATION	SIDE
MP 72.2	RT
MP 76	RT

* CONSTRUCT WITH THE SAME PAVEMENT STRUCTURE AS THE ADJACENT ROADWAY

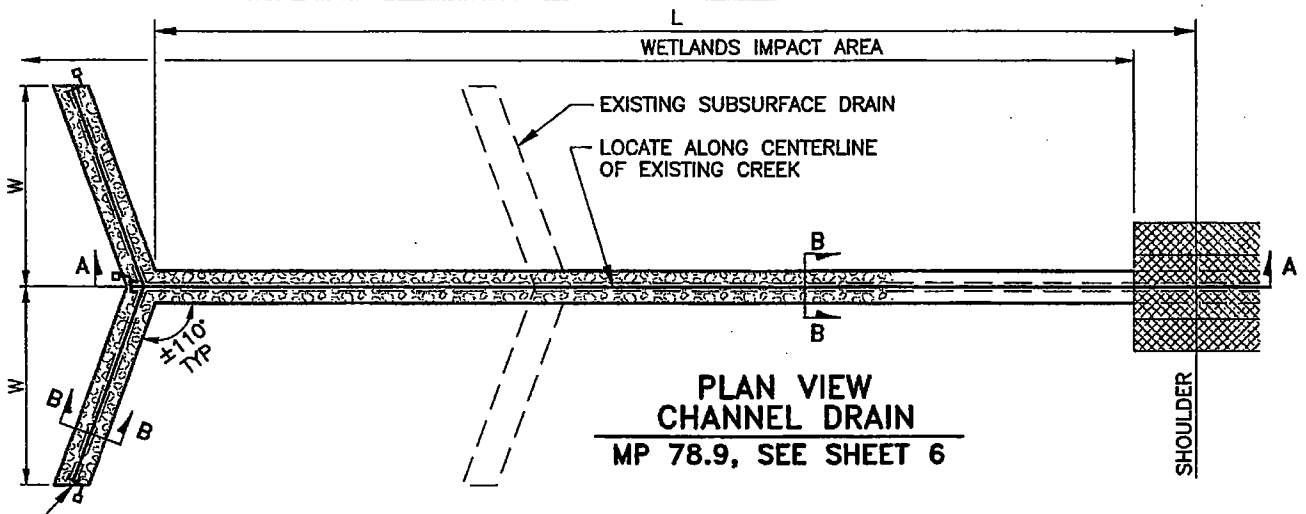
PLAN VIEW

SECTION A–A

POA-2006-1986-4
STEESE HWY MP 69–81
NAME: SURFACE TREATMENT
TITLE: WOOD CURB AND OUTFALL
LOCATION: STEESE HWY, ALASKA

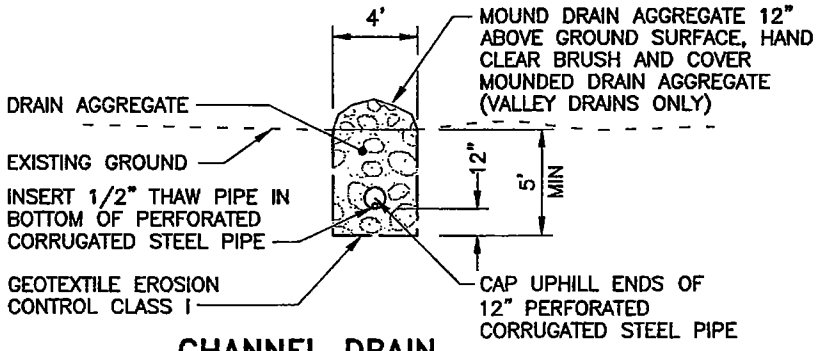
Sheet 4 of 12 Date Oct 2006

P:\2001\F01015\N\MP69-81\N6981scF01015: Sht 4 10/20/2006 – 11:44am



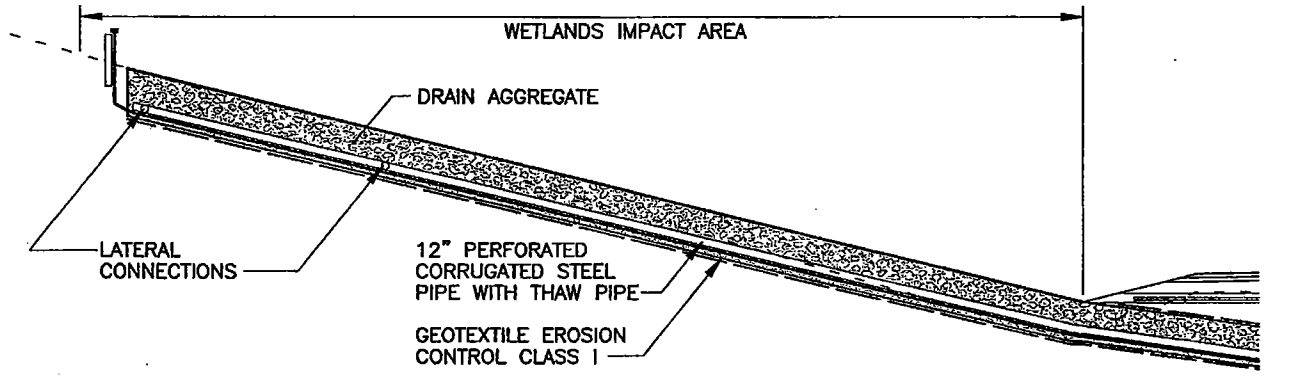
PLAN VIEW CHANNEL DRAIN

MP 78.9, SEE SHEET 6



CHANNEL DRAIN

SECTION B–B



SECTION CHANNEL DRAIN

SECTION A–A

NOTE:
SEE SHEET 6 FOR LOCATION AND WETLANDS IMPACT AREA

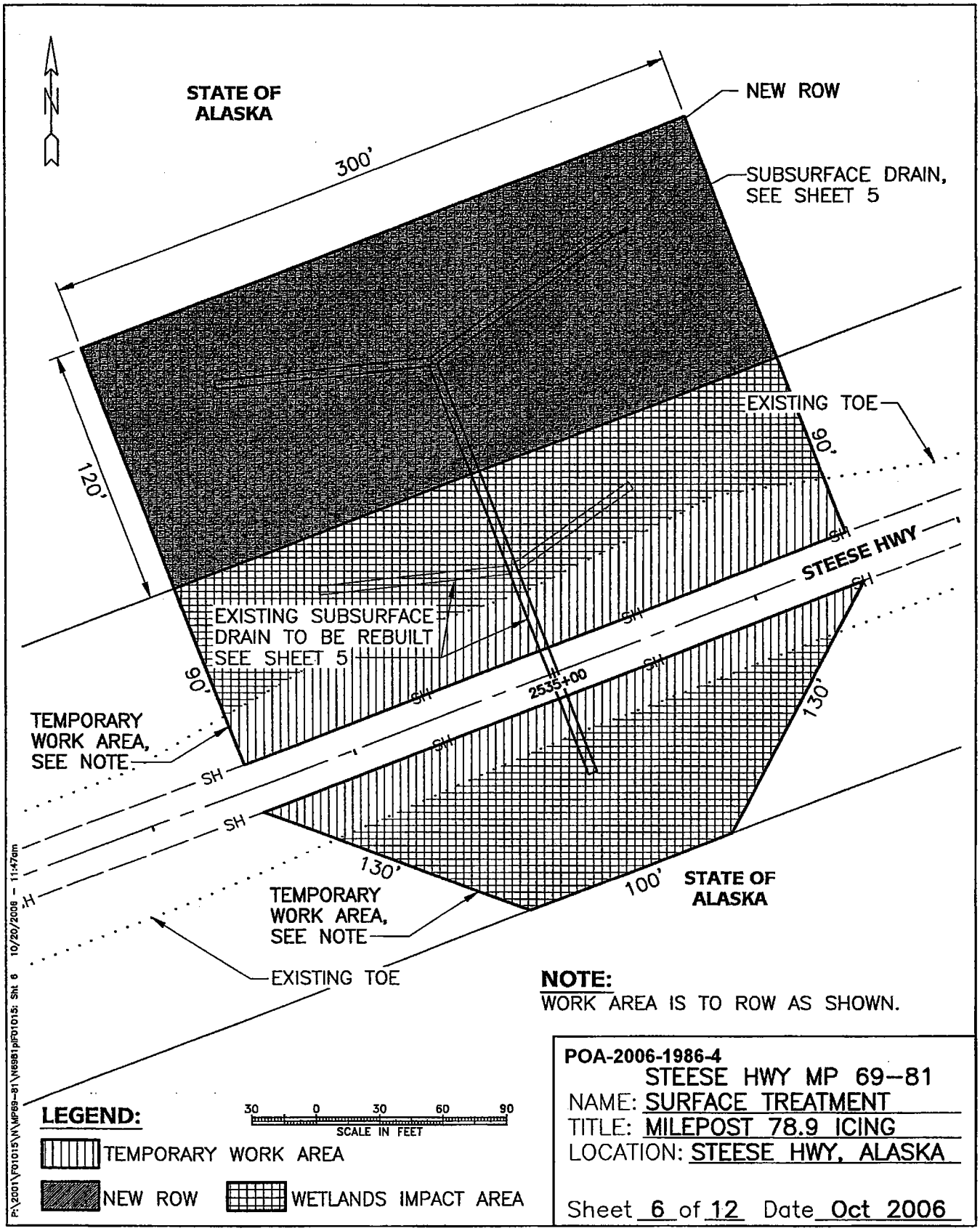
CHANNEL DRAIN TABLE

MILEPOST	L	W	H
MP 78.9	140'	100'	5'

P:\2001\F01015\N\MP69-81\N6981scF01015: Sht 5 10/20/2006 - 11:45am

POA-2006-1986-4
STEESE HWY MP 69–81
NAME: SURFACE TREATMENT
TITLE: DRAINAGE DETAILS
LOCATION: STEESE HWY, ALASKA

Sheet 5 of 12 Date Oct 2006



NOTE:
WORK AREA IS TO ROW AS SHOWN.

LEGEND:

30 0 30 60 90
SCALE IN FEET

TEMPORARY WORK AREA

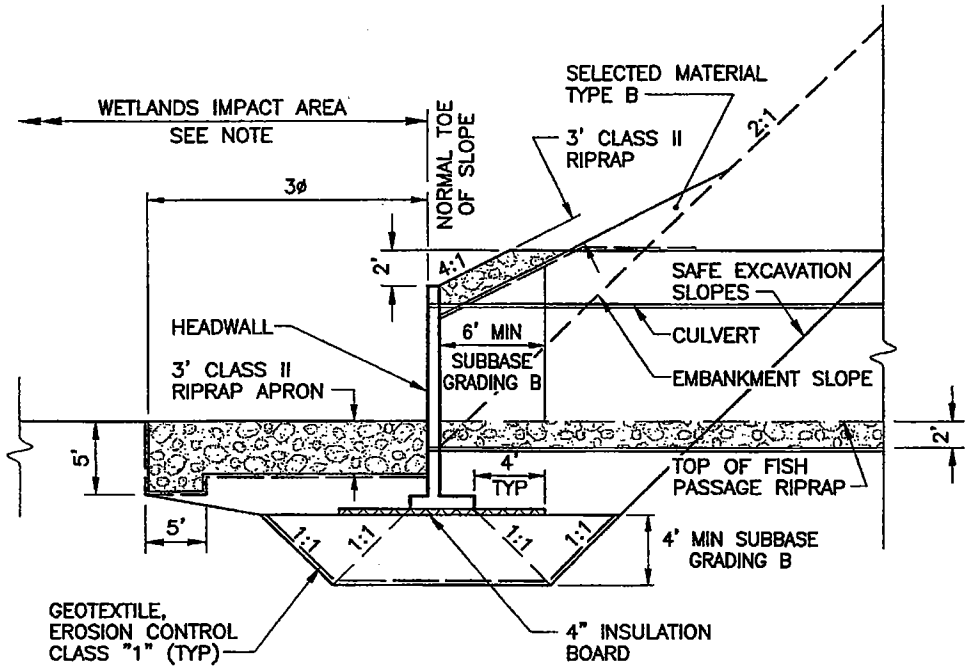
NEW ROW

WETLANDS IMPACT AREA

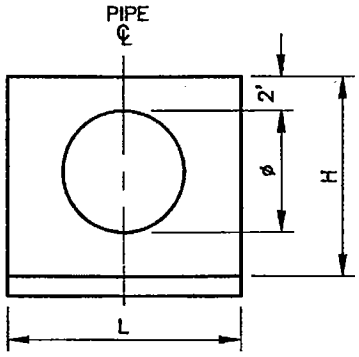
POA-2006-1986-4
STEESE HWY MP 69–81
NAME: SURFACE TREATMENT
TITLE: MILEPOST 78.9 ICING
LOCATION: STEESE HWY, ALASKA

Sheet 6 of 12 Date Oct 2006

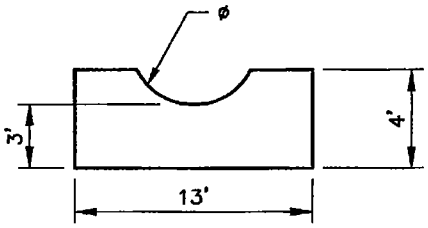
P:\2001\F01015\N\MP69-81\N6981plF01015: Sht 6 10/20/2006 - 11:47am



INLET RIPRAP AND HEADWALL FOUNDATION DETAIL
IDAHO CREEK AND MONTANA CREEK



LARGE HEADWALL II DETAIL



DEADMAN DETAIL
IDAHO CREEK AND MONTANA CREEK

HEADWALL TABLE

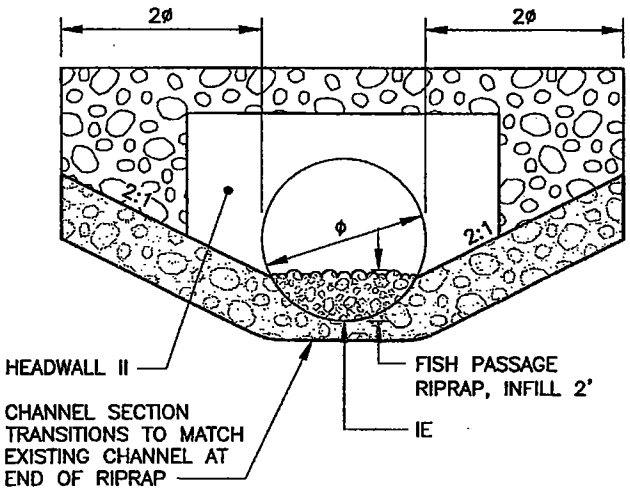
CREEK	ø	HEADWALL II H	HEADWALL II L
IDAHO	10'	14'	41'
MONTANA	10'	14'	41'

NOTE:
SEE SHEETS 10, 11 & 12 FOR LOCATION AND WETLANDS IMPACT AREA.

P:\2001\F01015\N\MP69-81\N6981scF01015: Sht 7 10/20/2006 - 11:45am

POA-2006-1986-4
STEESE HWY MP 69-81
NAME: SURFACE TREATMENT
TITLE: HEADWALL DEADMAN DETAILS
LOCATION: STEESE HWY, ALASKA

Sheet 7 of 12 Date Oct 2006



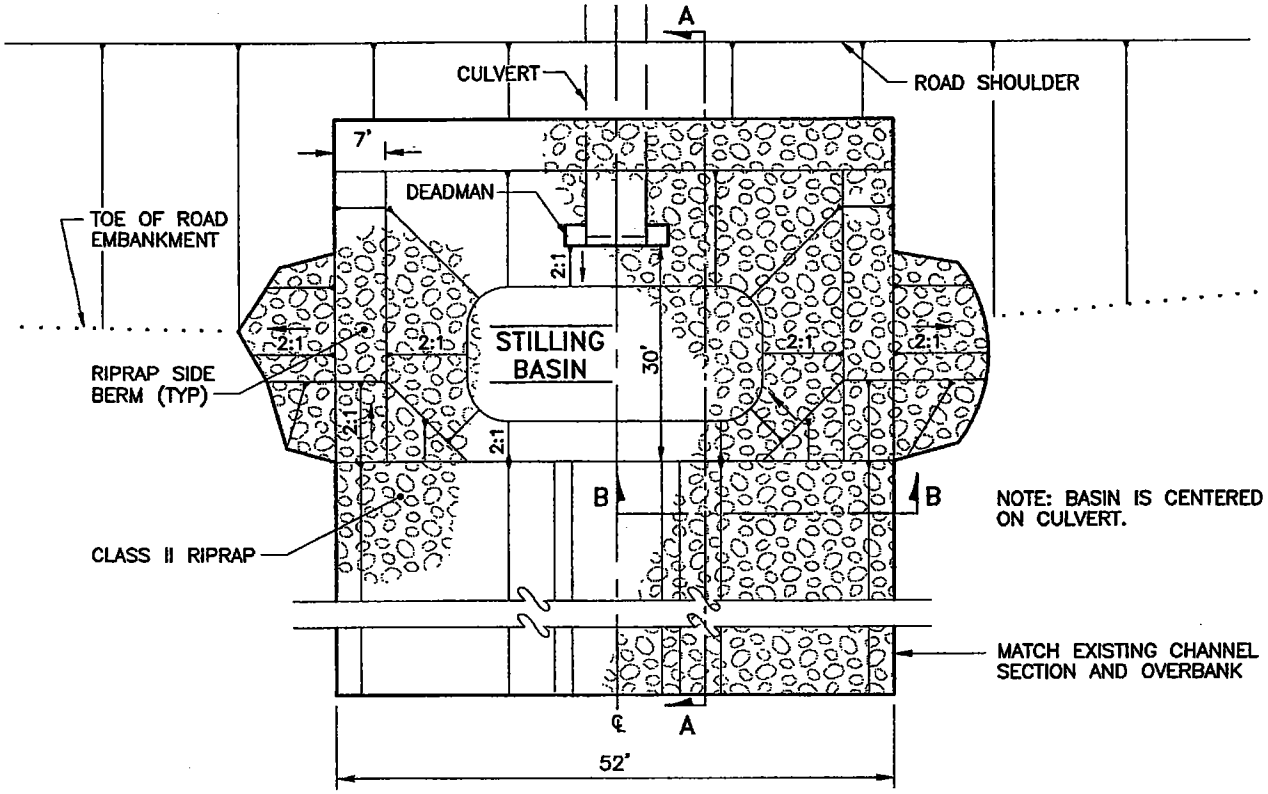
CHANNEL SECTION

IDAHO CREEK
MONTANA CREEK

POA-2006-1986-4
STEESE HWY MP 69–81
NAME: SURFACE TREATMENT
TITLE: CHANNEL SECTION
LOCATION: STEESE HWY, ALASKA

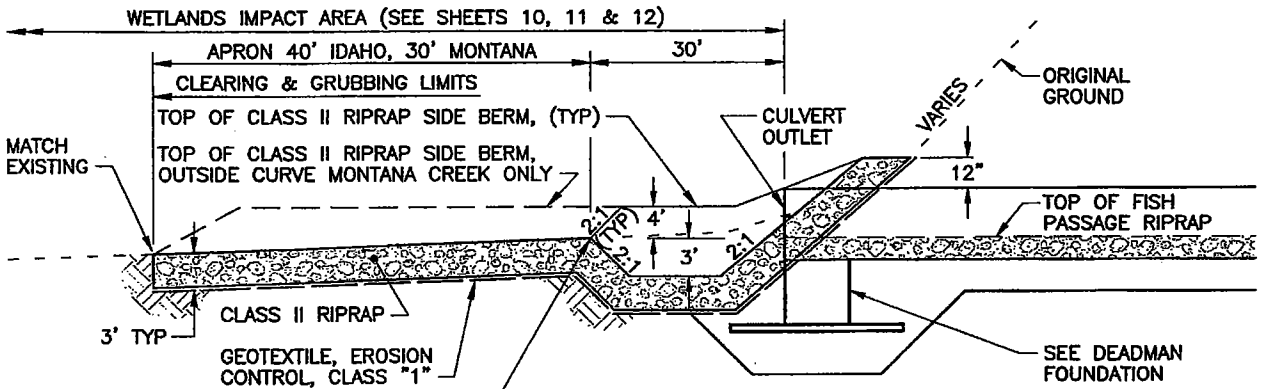
Sheet 8 of 12 Date Oct 2006

P:\2001\F01015\N\MP69-81\N6981scF01015: Sht 8 10/20/2006 - 11:46am

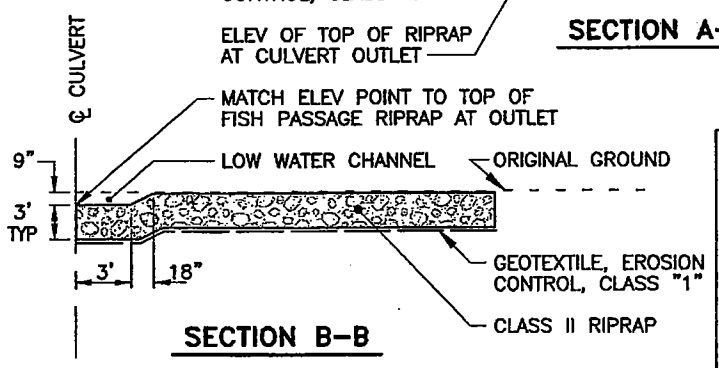


STILLING BASIN W/ DEADMAN PLAN

IDAHO CREEK AND MONTANA CREEK OUTLET



SECTION A–A



SECTION B–B

P:\2001\F01015\N\MP69-81\N6981scF01015: Sht 9 10/26/2006 - 5:35pm

POA-2006-1986-4

STEESE HWY MP 69–81

NAME: SURFACE TREATMENT

TITLE: STILLING BASIN DETAILS

LOCATION: STEESE HWY, ALASKA

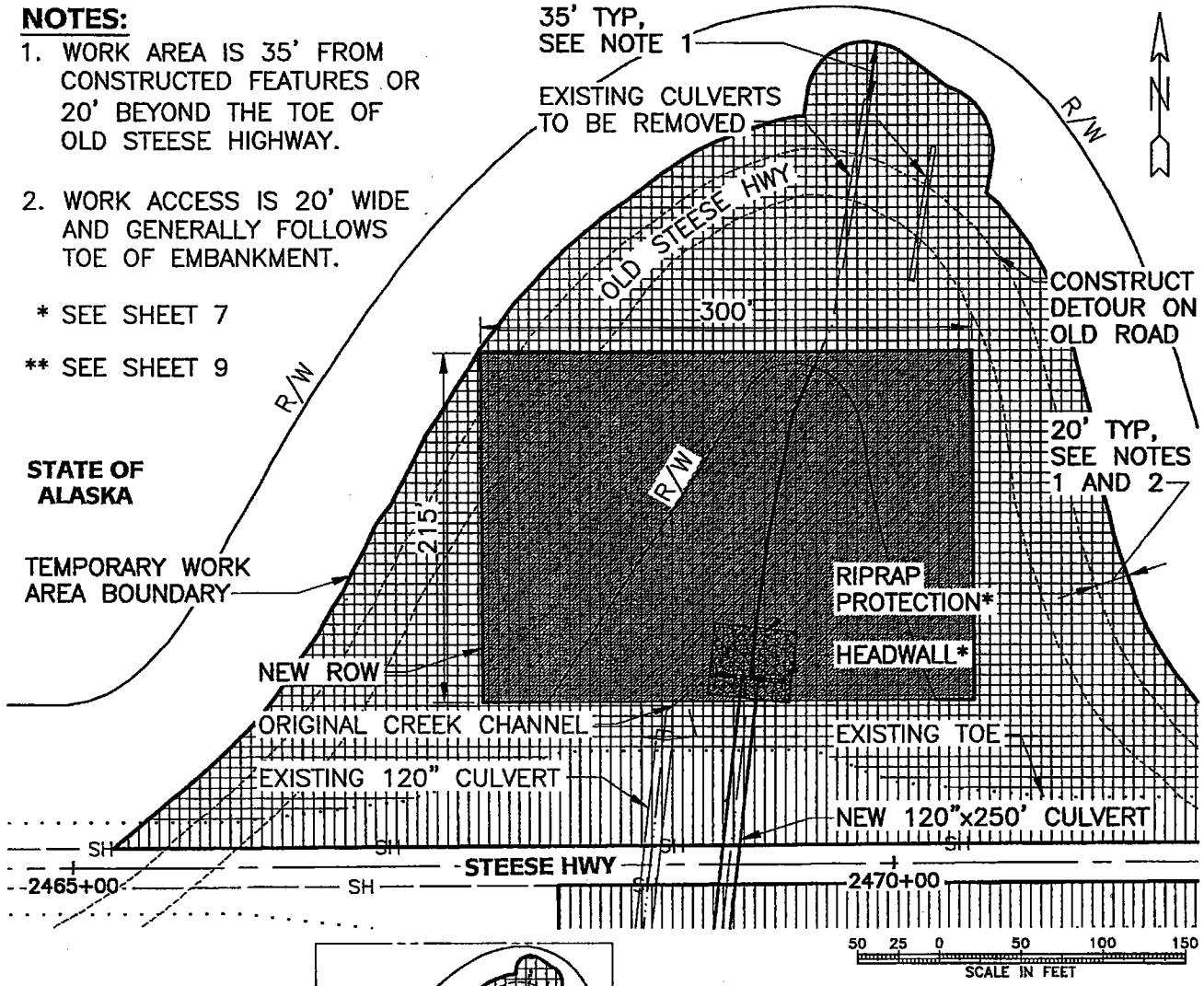
Sheet 9 of 12 Date Oct 2006

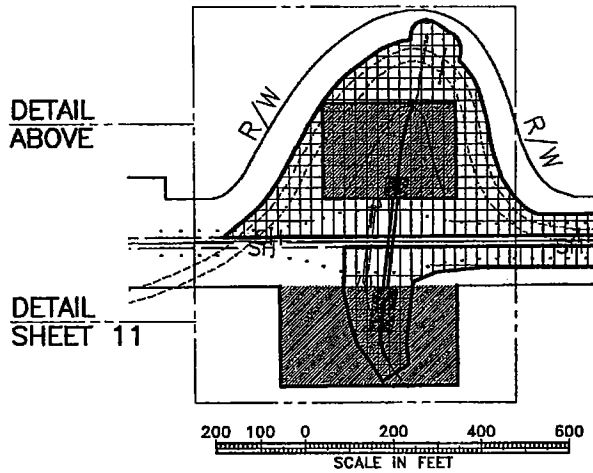
NOTES:

1. WORK AREA IS 35' FROM CONSTRUCTED FEATURES OR 20' BEYOND THE TOE OF OLD STEESE HIGHWAY.
2. WORK ACCESS IS 20' WIDE AND GENERALLY FOLLOWS TOE OF EMBANKMENT.

* SEE SHEET 7

** SEE SHEET 9





LEGEND:

- TEMPORARY WORK AREA
- NEW ROW
- WETLANDS IMPACT AREA

POA-2006-1986-4

STEESE HWY MP 69–81

NAME: SURFACE TREATMENT

TITLE: IDAHO CREEK

LOCATION: STEESE HWY, ALASKA

Sheet 10 of 12 Date Oct 2006

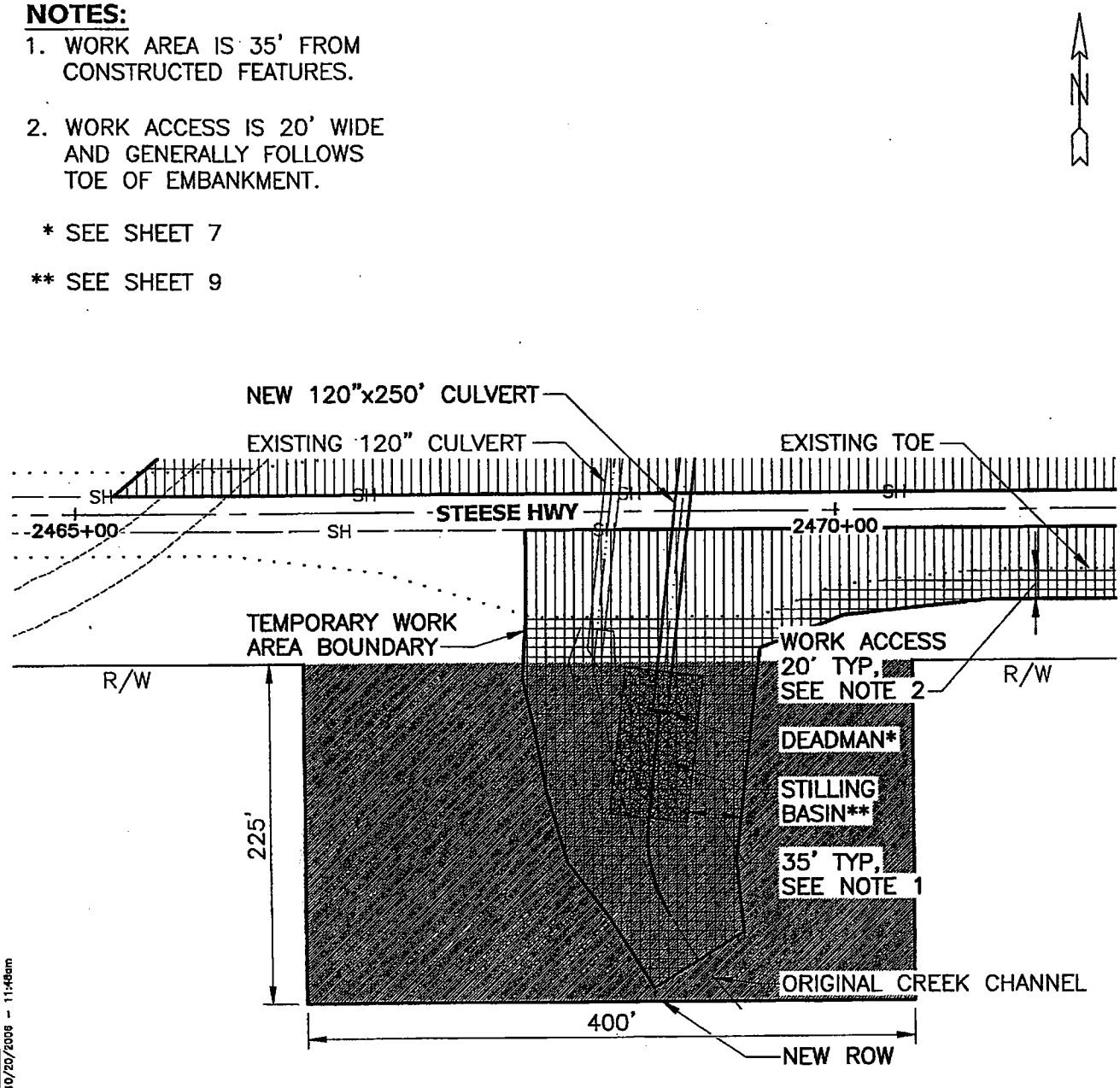
P:\2001\F01015\W\MP69-81\N8981plF01015: Sht 10 10/25/2006 - 5:37pm

NOTES:

1. WORK AREA IS 35' FROM CONSTRUCTED FEATURES.
2. WORK ACCESS IS 20' WIDE AND GENERALLY FOLLOWS TOE OF EMBANKMENT.

* SEE SHEET 7

** SEE SHEET 9



STATE OF ALASKA

LEGEND:

50 25 0 50 100 150
SCALE IN FEET

TEMPORARY WORK AREA

NEW ROW

WETLANDS IMPACT AREA

POA-2006-1986-4

STEESE HWY MP 69–81

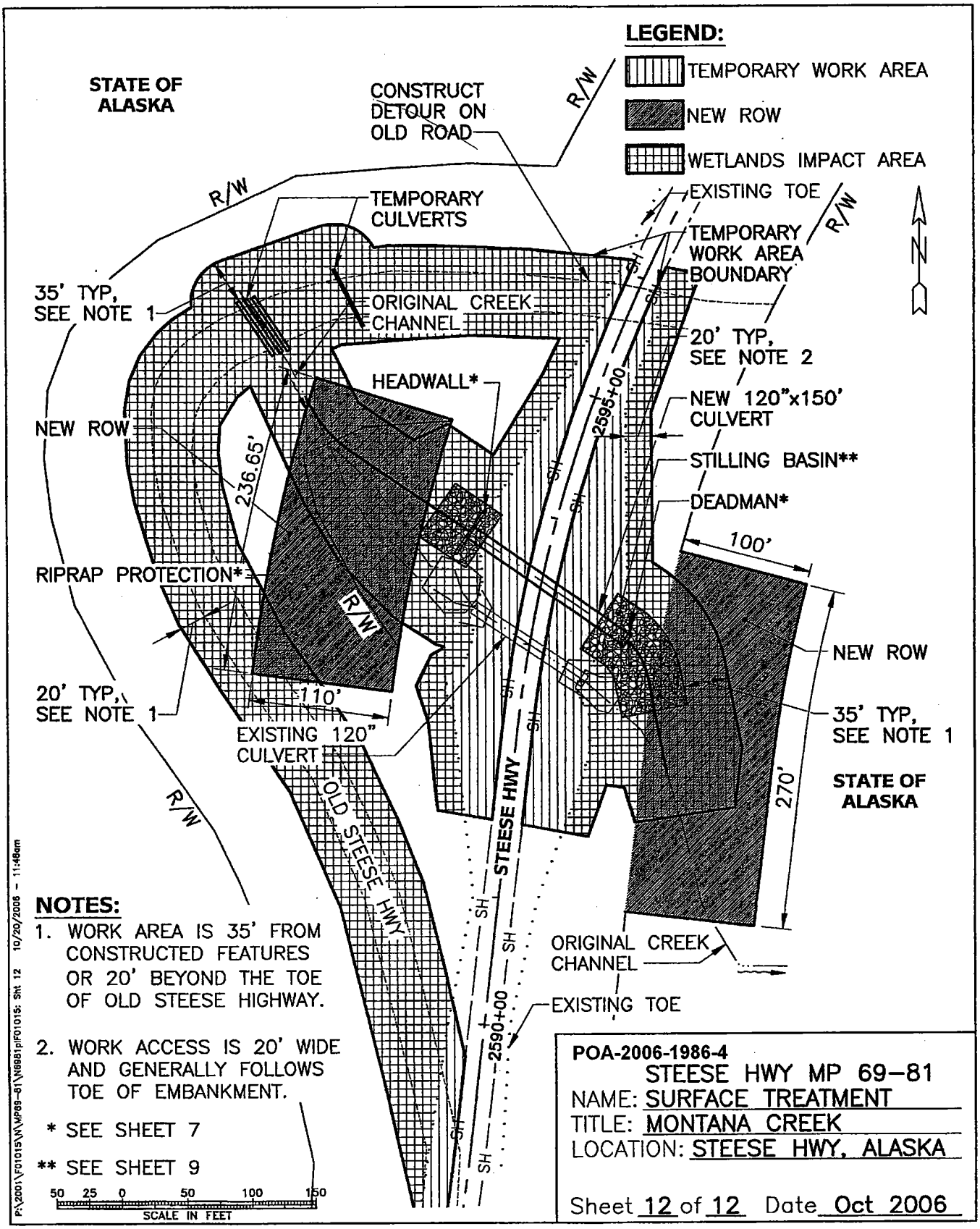
NAME: SURFACE TREATMENT

TITLE: IDAHO CREEK

LOCATION: STEESE HWY, ALASKA

Sheet 11 of 12 Date Oct 2006

P:\2001\FD1015\NW\MP69-81\N8981pIFD1015: Sht 11 10/20/2006 - 11:48am


LEGEND:
TEMPORARY WORK AREA
NEW ROW
WETLANDS IMPACT AREA
STATE OF ALASKA
CONSTRUCT DETOUR ON OLD ROAD
R/W
TEMPORARY CULVERTS
EXISTING TOE
TEMPORARY WORK AREA BOUNDARY
35' TYP, SEE NOTE 1
ORIGINAL CREEK CHANNEL
20' TYP, SEE NOTE 2
HEADWALL*
NEW 120"x150' CULVERT
NEW ROW
236.65'
2595+00
STILLING BASIN**
DEADMAN*
100'
RIPRAP PROTECTION*
20' TYP, SEE NOTE 1
110'
EXISTING 120" CULVERT
NEW ROW
35' TYP, SEE NOTE 1
STATE OF ALASKA
270'
OLD STEESE HWY
STEESE HWY
SH
ORIGINAL CREEK CHANNEL
EXISTING TOE
2590+00
NOTES:
1. WORK AREA IS 35' FROM CONSTRUCTED FEATURES OR 20' BEYOND THE TOE OF OLD STEESE HIGHWAY.
2. WORK ACCESS IS 20' WIDE AND GENERALLY FOLLOWS TOE OF EMBANKMENT.
* SEE SHEET 7
** SEE SHEET 9
50 25 0 50 100 150
SCALE IN FEET
P:\2001\F01015\W\MP69-81\N6981pl\F01015; Sht 12 10/20/2006 - 11:46am
POA-2006-1986-4
STEESE HWY MP 69-81
NAME: SURFACE TREATMENT
TITLE: MONTANA CREEK
LOCATION: STEESE HWY, ALASKA
Sheet 12 of 12 Date Oct 2006

Steese Highway Milepost 69-81 Surface Treatment
Project No. STP-0670(34)/60916

SYNOPSIS OF WETLANDS INVOLVEMENT

PROJECT DESCRIPTION

The Alaska Department of Transportation and Public Facilities (DOT&PF) proposes to construct the following improvements to Steese Highway Milepost 69-81 (Sheet 2):

- *Reconditioning and Associated Improvements* – Surface the roadway with a high-float asphalt surface course (28 feet wide) to improve the driving surface and alleviate roadway dust, thus improving visibility and safety; upgrade guardrail to meet current height and length-of-need standards; remove vegetation from road right-of-way to improve sight distance.
- *Icing Area Improvements* – Reduce icing problems at one location by constructing a rock drain system to ease the burden of high maintenance costs.
- *Embankment Area Improvements* – Use excavated material to improve embankment slopes at several locations.
- *Culvert Replacement and Improvements* – Replace damaged or inadequate culverts and improve fish passage culverts at Idaho and Montana Creeks. Improvements at Idaho and Montana Creeks will be the installation of new steel pipe culverts in the original stream channels along with the construction of a headwall with riprap protection at each inlet and the construction of a deadman with stilling basin and apron at each outlet to reduce the risk of embankment erosion. Each of these culverts will be in-filled with 2 feet of fish passage riprap to mimic the original stream bed.

No changes in road alignment are proposed. Acquisition of permanent right-of-way is required at Milepost 78.9 Icing Area (Sheet 6) along with Idaho Creek (Sheets 10 & 11) and Montana Creek (Sheet 12). Temporary construction easements would be required for some of the icing area and riprap improvements.

SUMMARY OF WETLAND IMPACTS

In a letter dated September 16, 2004, the USACE approved the preliminary wetlands delineation and issued a jurisdictional determination for the proposed project. Based on this jurisdictional determination, the stretch of road between MP 73 and MP 79 (except drainages) is uplands; the remainder of the project is in wetlands (Sheet 2). Within the limits of wetlands, all activities outside the existing roadway toe are considered a wetlands impact.

The proposed improvements would require the placement of clean fill material into wetlands. Included in this wetlands impact area is clean fill material placed below ordinary high water mark of waters of the United States. An additional temporary wetlands impact is associated with temporary work areas, including construction access, equipment staging and operation area, and temporary stockpiles. The impacts associated with each of the improvements are summarized in Table 1, Page 2.

Table 1 – Summary of Wetland Impacts

Project Improvement	WETLANDS					WATERS OF THE U.S.***		
	Fill Volume (CY)		Fill Type*	Impact Area (ac)	Temp Work Area (ac)	Area (ac)	Fill Volume (CY)	
	Permanent	*Temporary*					*Permanent*	*Temporary*
Reconditioning								
Vegetation Clearing	0	—	—	11	0	—	—	—
Rock Outfalls	100	—	R	0.1	0.2	—	—	—
MP 78.9 Icing Area	300	—	R	0.6	1.9	—	—	—
Embankment Improvements	88,500	—	C/U	4.7	3	—	—	—
Small Culvert Replacements	100	—	R	0.1	3.9	—	—	—
Large Culverts	4,500	45,000	R/B/C	0.9	11.3**	0.8	2,000	500
TOTAL	**93,500**	**45,000**		**17.4**	**20.3**	**0.8**	**2,000**	**500**

* B = Bedding Material; C = Type C Material; R = Riprap; U = Unclassified Excavation

** Includes Temporary Work Area for removal of culvert on old Steese alignment

*** The impact area and fill volume for waters of the U.S. are included in the Wetlands totals

RECONDITIONING AND ASSOCIATED IMPROVEMENTS

This project would provide a leveling course, base course, and an asphalt surface course (Hi-Float) for this section of the Steese Highway (Sheet 3). The existing road profile would be raised for the resurfacing. To improve sight distances, brush would be mechanically cleared for approximately 16 feet from the edge of the traveled way to the toe of the slope, with an additional 5 feet on the backslope in cut conditions. In fill conditions, the mechanical clearing would extend 15 feet from the edge of traveled way.

Guardrail would be replaced at existing locations, and constructed to meet current height and length-of-need design standards. Wood curb and rock outfalls would be added at two of the guardrail locations to mitigate erosion between the posts (Sheet 4). The rock outfalls would extend beyond the toe of the existing slope. Both outfalls would impact adjacent wetlands, resulting from placement of riprap and associated with temporary work areas. No other wetland impacts are anticipated. See table 1 for wetlands impacts from road reconditioning and associated improvements.

ICING AREA IMPROVEMENTS

There is one icing area in this section of the Steese Highway. To address this problem, rock drains will be installed to intercept and collect water from valley bottoms and back slopes, and convey the water under the road (Sheets 5 & 6).

Table 1 shows the expected impact for the drainage structure on the Steese Highway.

EMBANKMENT AREA IMPROVEMENTS

To increase recovery area and public safety, embankment slopes in lower fill areas would be reshaped in a barn-roof template using excavated material from the road repairs (Sheet 3). This will include the placement of a toe berm in some areas to improve embankment stability. Table 2 shows the expected impacts.

Table 2 – Embankment Slope Improvement Areas – Wetlands Involvement

Mile Post	Sheet #	Side of Road (going north)	Total Length (lineal feet)	Total Fill Volume (cy)	Total Fill Area (ac)	Temporary Work Area (ac)
70.3	3	Right	1,000	19,000	1.0	0.6
70.9	3	Right	800	20,000	0.8	0.4
72.8	3	Right	1,100	500	0.3	0.6
79.4	3	Right	2,600	49,000	2.6	1.4
Total			**5,500**	**88,500**	**4.7**	**3.0**

The project would generate insufficient material to construct all sites identified in the Categorical Exclusion. Only the sites within the wetlands area that are shown on the construction documents have been included in the permit application.

CULVERT REPLACEMENTS AND IMPROVEMENTS

Small Culvert Replacements

There are 67 culverts in this section of the Steese Highway. This includes 63 small diameter (≤48") culverts and 4 large diameter (>48") culverts. It is estimated that 13 of the small diameter culverts will require replacement as a part of this project. In addition, there are 2 culverts on the old Steese alignment at Idaho Creek that will be removed. Work outside of the existing footprint of the highway would include excavation, installation of erosion protection rock and culvert end sections, and a 50-foot radius temporary work area on each end of the culvert. See Table 1 for impacts.

Large Culvert Replacements and Improvements

The project includes the replacement of the 120-inch culverts at Idaho Creek and Montana Creek with culverts of the same size in the original stream channel. The project also includes the installation of a headwall, a deadman (Sheet 7), and a stilling basin (Sheet 9) with riprap protection (Sheet 8) to reduce the risk of embankment erosion at both creeks. Both culverts will be filled in with 2 feet of riprap to improve fish passage. An increase in the footprint of the Steese Highway is expected due to work on large culverts (see Table 3). A temporary work area is required for each culvert, and there may be a temporary diversion of the creek during construction. See Table 3 for impacts to waters of the U.S. at Idaho Creek and Montana Creek.

Table – Large Culvert Replacement – Wetlands Involvement

Project Improvement	WETLANDS				WATERS OF THE U.S.****		
	Fill Volume (CY)		Impact Area (ac)		Area (ac)	Fill Volume (CY)	
	*Permanent****	*Temporary*	*Permanent*	*Temporary*		*Permanent*	*Temporary*
Idaho Creek*	2,000	32,000	0.4	6.9	0.2	750	—
Culvert Detour	—	100	—		0.2	—	—
Montana Creek Culvert**	2,500	11,500	0.5	4.4	0.3	1,250	—
Culvert Detour	—	1,400	—		0.1	—	500
TOTAL	**4,500**	**45,000**	**0.9**	**11.3**	**0.8**	**2,000**	**500**

*32,000 cy temporary stockpiling of excavated material
**11,500 cy temporary stockpiling of excavated material
***Channel work / Headwall / Deadman / Stilling basin
****The impact area and fill volume for Waters of the U.S. are included in the Wetlands totals

Excavated material from culvert replacements and improvements would be used to improve embankment slopes. If the material is determined to be unsuitable for embankment improvements, it would be placed in berms at the toe of slope improvement areas to improve embankment stability, in closed portions of material sites, or stockpiled for the reclamation of active material sites. Some of the embankment improvement sites are in wetlands. The impacts to wetlands associated with the use of excavated material from culvert work are addressed under Embankment Area Improvements above.

It appears that, with improvements (i.e., placement of additional fill and temporary culverts along the old road bed), the original Steese Highway alignment would be usable as a detour during replacement of the Idaho Creek and Montana Creek culverts. At Idaho Creek, the construction of the detour is anticipated to require the placement of material into wetlands for the reconstruction of the old road bed along with the use of two existing culverts. The culverts and fill in the wetlands would be removed from the old road bed at the end of the project. At Montana Creek, the construction of the detour is anticipated to require the placement of material into wetlands for the reconstruction and placement of three 36-inch and one 24-inch temporary culverts in the old road bed. The culverts and fill in the wetlands would be removed from the old road bed at the end of the project. Both creeks will be re-profiled at these locations to match existing stream gradients.

P:\2001\F01015\N\Permits\69-81 COE Oct-06\69-81 Wetlands Synopsis.doc